



November 13, 2009

Darcy L. Endo-Omoto
Vice President
Government & Community Affairs

The Honorable Chairman and Members of the
Hawaii Public Utilities Commission
465 South King Street, First Floor
Kekuanaoa Building
Honolulu, Hawaii 96813

FILED
2009 NOV 13 PM 3:53
PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Docket No. 2008-0273 – Feed-in Tariff (“FIT”) Proceeding
Qualified Candidates for the Independent Observer Position

Pursuant to the Order Setting Schedule filed on October 29, 2009 (“Order”), Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Limited (collectively the “Hawaiian Electric Companies”), respectfully submit for Commission review and approval their list of qualified candidates for the Independent Observer to oversee the queuing process for FIT projects¹.

The Hawaiian Electric Companies have identified five candidates qualified for the Independent Observer position:²

- 1) Carl Freedman
Principal
Haiku Design & Analysis
4234 Hana Highway
Haiku, HI 96708
- 2) Matthew I. Kahal
Economic Consultant
c/o Exeter Associates, Inc.
5565 Sterrett Place, Suite 310
Columbia, MD 21044

¹ See, page 93 of the Decision and Order filed September 25, 2009 in the above subject proceeding (“Decision and Order”), which states that “An independent third party... will assist in developing the queuing process, and inform parties of the queue length and their status in it. The independent third party will also monitor how the utility administers the queue.”

² It is the position of the Hawaiian Electric Companies that any candidate selected for the Independent Observer position should have a comparable level of experience to the candidates set forth herein.

- 3) Barry J. Sheingold
President
New Energy Opportunities, Inc.
Sudbury, MA 01776
- 4) Alan Kessler
Managing Director
Accion Group, Inc
244 North Main Street
Concord, NH 03301-5041
- 5) Harry T. Judd
Managing Director
Accion Group, Inc
244 North Main Street
Concord, NH 03301-5041

Attached are the statements of qualifications and other supporting material for each of the five Independent Observer candidates. (See Attachments 1, 2, and 3, respectively and Attachment 4 for candidates 4 and 5.) All five candidates have provided their approval to be considered for the docket at hand.

In order to be able to comply with the Commission's directive in the Decision and Order that the Independent Observer "assist in developing the queuing process" and given the February 1, 2010 deadline for the filing of queuing and interconnection procedures,³ the Hawaiian Electric Companies respectfully request that the Commission approve the list of qualified candidates⁴ and approve the Independent Observer contract⁵ in as expeditious a manner as may be possible.

Consistent with this request, it is the Hawaiian Electric Companies' intention to work with the parties to accelerate the process of retaining an Independent Observer to the greatest degree possible. The filing of this list of qualified candidates for the Independent Observer position is consistent with the directives and process outlined in the Decision and Order (at page 93).

³ Procedural Step 14 in the Order Setting Schedule.

⁴ Procedural Step 3 in the Order Setting Schedule.

⁵ Procedural Step 8 in the Order Setting Schedule.



The Honorable Chairman and Members of the
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All of the Independent Observer candidates listed above are qualified candidates as determined by the Commission in the competitive bidding process.⁶

Sincerely,



Darcy Endo-Omoto
Hawaiian Electric Company, Inc.
Hawaii Electric Light Company, Inc.
Maui Electric Company, Limited

c: Service List

⁶ In Decision and Order No. 23503, filed June 22, 2007, in Docket No. 03-0372, the Commission approved the list of qualified candidates submitted by the Hawaiian Electric Companies on May 9, 2007. The May 9, 2007 list included Barry J. Sheingold, Alan Kessler, Matthew I. Kahal, and Carl Freedman. In Decision and Order No. 24088, filed March 13, 2008, in Docket No. 03-0372, the Commission approved the addition of Mr. Harold T. Judd of Accion Group, Inc. to their list of qualified candidates for the Independent Observer position.



SERVICE LIST
(Docket No. 2008-0273)

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HAIKU DESIGN & ANALYSIS

4234 Hana Hwy., Haiku, HI., 96708
(808) 572-2519

May 3, 2007

To: Leon R. Roose
Manager, System Planning Department
Hawaiian Electric Company, Inc.
PO Box 2750
Honolulu, HI 96840-0001

From: Carl Freedman, Principal
Haiku Design & Analysis

Re: Letter of Interest and Statement of Qualifications for
Independent Observer – Framework for Competitive Bidding
Decision and Order No. 23121, Docket No. 03-0372 , December 8, 2006

I am interested in serving as an Independent Observer in the competitive bidding procedures for the Hawaiian Electric Company and its subsidiary utilities (collectively HECO). I am well qualified to serve in this capacity and would serve HECO and the Public Utilities Commission (Commission) competently, fairly and economically.

The role of Independent Observer is an important component of the new competitive bidding process. Active participation by a broad spectrum of RFP respondents is contingent upon faith that the process will be implemented fairly by the utility and Commission. The credibility and success of the process depends upon verification of the utility's performance by an objective, competent and credible Independent Observer.

The Framework for Competitive Bidding lists several necessary qualifications for the tasks that must be performed. These include (a) knowledge about the unique characteristics and needs of the utilities including (b) the unique challenges and operational requirements of small, non-interconnected island electric grids, (c) experience and familiarity with utility modeling, transmission system planning and operational characteristics, (d) a working knowledge of common PPA terms and conditions and negotiations, (e) ability to work effectively with the utilities and Commission and (f) ability to demonstrate impartiality.

KNOWLEDGE ABOUT THE UNIQUE CHARACTERISTICS, CHALLENGES AND OPERATIONAL REQUIREMENTS OF HAWAII'S NON-INTERCONNECTED ISLAND UTILITIES AND ELECTRIC GRIDS.

I am intimately familiar with the unique characteristics and challenges of Hawaii's electric utilities from sixteen years of work in the state on system planning and regulation

issues. My experience in Hawaii is documented in the attached resume and is discussed further below.

In written testimony to the Commission in several dockets I have performed and presented rigorous analyses of the operation of the Hawaii utility systems including system simulations, capacity expansion and production cost analyses. In the context of performing these analyses and as a participant in the utility IRP advisory groups I have maintained an ongoing (though intermittent) dialogue with the utilities' planning, operations and regulatory staff.

In addition to my analytical work in a planning and review capacity, I have also often served an expository role, explaining the unique characteristics of Hawaii's electric systems and regulatory conventions to visiting mainland consultants, to regulators, to permitting authorities and to Hawaii's diverse energy stakeholders. My understanding of many of these unique characteristics is documented in expository terms in a report I prepared for the Hawaii Energy Policy Forum, *Hawaii Energy Utility Regulation and Taxation* (2003).

UTILITY MODELING, TRANSMISSION SYSTEM PLANNING

I have a sound theoretical, practical and operational understanding of the economic, simulation and planning models used by electric utilities. I have personally designed and used several models in the context in system planning, integrated resource planning, differential revenue requirements analysis, determination of avoided costs, determination of system efficiency and operation costs (in rate case testimony) and in the evaluation of utility and PPA resource projects.

I am familiar with the software used by HECO in its system planning analyses. I do not have a license and have not worked directly with the Strategist model (since it was renamed as such) but I have worked with its predecessors, including its principal components. For example, I have documentation for and have worked directly with the input files and reports of the LFA, GAF and older Proview modules.

I have written source code for several electric resource evaluation models, including the development of a Scenario Analysis Model which includes a capacity expansion model designed for Hawaii's island utility systems and incorporating a commercial production cost model. This model is described in testimony to the Commission in several dockets. I used the model for analysis of several matters before the Commission including:

- Docket No. 7310 (Avoided Cost Docket)
- Docket Nos. 7357, 7358 and 7359 (HECO Utilities' first IRP dockets)
- HELCO's Generation Resource Contingency Plan (undocketed, circa 1995)
- Docket No. 7956 (HELCO – KCP Complaint / PPA)
- Docket No. 94-0079 (HELCO – EDC Complaint / PPA)
- Docket No. 94-0140 (HELCO Rate Case)
- Docket No. 97-0240 (HELCO Rate Case)
- Docket No. 94-0345 (MECO Rate Case)
- Docket No. 00-0135 (Apollo Wind Energy PPA)

I am familiar generally with the transmission planning process used by HECO and have direct experience with detailed review of the specific transmission planning and economic issues associated with the assessment and negotiation of PPA's in Hawaii. For example, on behalf of the Division of Consumer Advocacy it was my responsibility to review and brief all filings and issues in the multiple HELCO PPA and complaint dockets in the 1990's. The planning and economics of transmission interconnection of several competing projects for HELCO's system were important issues for the analysis, comparison and negotiation of proposed PPA's.

WORKING KNOWLEDGE OF COMMON PPA TERMS AND CONDITIONS AND NEGOTIATIONS

I have knowledge of common PPA terms and conditions and negotiations based on my work experience in the State of Hawaii. This experience includes detailed review of several proposed and several executed PPA's on behalf of the Division of Consumer Advocacy including critical examination of all PPA terms and conditions. I performed independent analysis of the avoided costs and comparative costs of several "competing" QF proposals, and detailed review and briefing of all filings in several QF complaint dockets.

I have assisted several potential independent power producers in the early stages of project evaluation.

I participated on the negotiating team of Apollo Energy Company regarding determination of avoided costs and terms for energy payments for a PPA with HELCO for repowering a utility-integrated wind farm.

ABILITY TO WORK EFFECTIVELY WITH THE UTILITIES AND COMMISSION AND ABILITY TO DEMONSTRATE IMPARTIALITY

I have worked in various capacities in the field of electric utility system planning and regulation for twenty-eight years. In Hawaii I have worked in this field for sixteen years for a spectrum of clients, including the Division of Consumer Advocacy, independent power producers, large customers, government agencies, public interest groups (such as the Hawaii Energy Policy Forum) and utilities, including HECO and MECO.

In all of my work in Hawaii I have developed and preserved the respect and trust of the State's energy stakeholders. I have shown myself to be consistently fair and able to be impartial. For example, I was selected unanimously by the twenty-one contentious and sometimes acrimonious participating parties in Docket No. 94-0345 to be the primary editor and chair the authoring committee of the *Collaborative Document: Renewable Energy Resources Investigation*, forwarded to the Hawaii Legislature by the Public Utilities Commission.

OTHER CONSIDERATIONS

PRIOR EXPERIENCE WITH FORMAL COMPETITIVE BIDDING PROCESSES

I do not have prior experience participating directly in any formal competitive bidding process. The Commission's Framework for Competitive bidding does not require prior experience in other jurisdictions but this is a reasonable consideration in the selection of an Independent Observer. For example, I would not bring to the role of Independent Observer direct experience with competitive bidding processes used in other jurisdictions or a "track record" upon which potential bidders could rely.

On the other hand, as noted in the Framework, Hawaii's electric utility systems have unique characteristics and challenges that are essential to consider in the competitive bidding process. Indeed, as the negotiating teams of Hawaii's utilities know intimately, these unique characteristics are often predominant considerations in the evaluation and integration of non-utility projects. In this regard I believe my particular strengths are important, especially my extensive familiarity with HECO's electric systems and Hawaii's regulatory frameworks and the trust and respect I have earned with Hawaii's energy stakeholders.

I have a network of mainland colleagues upon whom I can rely for collaboration and consulting services if specific circumstances require. I am also open to considering working collaboratively with other Independent Observer candidates.

ECONOMY AND LOGISTICS

Using an Independent Observer available locally in the State of Hawaii would be efficient and economical. The Independent Observer will serve most effectively if present, in person, for many aspects of the competitive bidding process. This may present logistical challenges and expenses for mainland candidates. In the long run, developing and using a local capability for this important service should be considered.

FAMILIARITY WITH HAWAII'S REGULATORY FRAMEWORKS

The competitive bidding process must function effectively in the context of Hawaii's regulatory frameworks generally. These include, for example, the Commission's IRP Framework and other adopted regulatory conventions and the policies and protocols of permitting agencies such as the Hawaii Department of Health. Familiarity with all aspects of Hawaii's specific regulatory environment is valuable for the role of the Independent Observer.

I have a working familiarity with Hawaii's regulatory frameworks and regulatory environment. I have been a principal participant in the development, execution and review of Hawaii's Integrated Resource Planning process. I made the initial recommendation to the Commission (Docket No. 6617, 1991) regarding using a competitive bidding process as a means of resource procurement that would be complimentary to the Integrated Resource Planning process.

I understand Hawaii's regulatory permitting environment. For example, I conceived the feasibility and facilitated the meeting between HECO/HELCO and the Department of

Health that memorialized the expedited processing approach for air permits for HELCO's small "emergency" skid mounted distributed generation units.

ATTITUDE

My primary interest in my work in this field is the furtherance of an efficient and effective utility regulatory program for the State of Hawaii. In the context of our existing governmental structure, the health of Hawaii's utilities and the welfare of Hawaii's people depend on fair and effective regulation.

I am sincerely interested in the success of the competitive bidding process. This includes the successful and timely procurement of generation resources and a process that is competitive, probative and fair and that is appreciated broadly as such.

In the past, I have appeared and testified "against" HECO's positions in several matters. I have at times been a critic of the details of HECO's analyses in regulatory proceedings. At the same time, I have hopefully been consistently fair and reasonable about my conclusions and constructive resolution of differences.

My approach has consistently been to examine the details of analyses rigorously and critically and then to make reasonable, circumspect conclusions and recommendations. As an Independent Observer I would expect to continue to be both rigorous in my examination and reasonable in my conclusions. I will continue, as always, to call things fairly as I see them.

Respectfully submitted,

Carl Freedman

Carl Freedman

4234 Hana Hwy.
Haiku, HI., 96708
(808) 572-2519 jcfm@hawaiiantel.net

Principal Consultant: Haiku Design and Analysis
Public Utility Regulatory Affairs
Integrated Resource Planning
Energy Resource Economic Analysis

EXPERIENCE: Utility Policy, Regulation and Economics

Utility Regulation and Taxation

- Authored a study of utility regulation in Hawaii for the Hawaii Energy Policy Forum: *Hawaii Energy Utility Regulation and Taxation: Practice, Policy and Incentives for Energy Efficiency, Renewable and Distributed Resources*. (2003)

Integrated Resource Planning

- Currently is under contract to prepare comprehensive Integrated Resource Plans for the Maui County Board of Water Supply for the Maui County Water Use and Development Plan
- Was a primary participant in the Hawaii PUC docket and collaborative establishing the current Framework for Integrated Resource Planning for Hawaii's energy utilities
- Performed a comprehensive review of the IRP's for each of Hawaii's energy utilities on behalf of the Hawaii Division of Consumer Advocacy
- Developed a Scenario Analysis Model incorporating a capacity expansion and production cost model for long term evaluation of conventional, renewable and conservation resources for Hawaii's electric utilities

Review and Negotiation of Power Purchase Agreements

- Performed detailed review of several proposed and several executed PPA's on behalf of the Division of Consumer Advocacy
- Performed detailed review and independent analysis of the avoided costs and comparative costs of several "competing" QF applications on behalf of the Division of Consumer Advocacy
- Reviewed all filings in several QF "complaint" dockets on behalf of the Division of Consumer Advocacy, including parties' arguments and Commission orders determining the components of avoided costs for firm capacity PPA's in Hawaii.
- Participated on the PPA negotiating team of Apollo Energy Company regarding determination of avoided costs and terms for energy payments for a PPA with HELCO for repowering Hawaii's oldest utility integrated wind farm.

Demand-Side Management (DSM) Incentives and Implementation

- Represented the Consumer Advocate in the DSM Cost Recovery and Incentives Working Group considering mechanisms for the Hawaii electric utilities
- Presented testimony to the Hawaii PUC (1991, 1995 & 2006) analyzing various DSM cost recovery and incentive options, including recommendations for a "sales decoupling" mechanism for Hawaii's utilities.

- Prepared a critical technical review that was instrumental in convincing Hawaiian Electric Company (HECO) not to scrap its portfolio of DSM programs as originally proposed in HECO's July, 1997 Draft IRP

Renewable Resource Development

- Represented the Hawaii Division of Consumer Advocacy in the PUC investigation on Barriers and Strategies to Remove Barriers to Renewable Energy Development
- Served as primary editor and chaired the authoring committee of the *Collaborative Document: Renewable Energy Resources Investigation*, cataloguing the findings of twenty-one participating parties and forwarded to the Hawaii Legislature by the Public Utilities Commission.
- Presented testimony and analysis to the Hawaii PUC quantifying the capacity value of wind resources to Hawaii electric utility systems
- Conceived and proposed one of the nation's first 'set aside' regulatory strategies for promotion of renewable resource development, adopted as an administrative rule by the Oregon Energy Facilities Siting Council in 1979
- Developed the first production costing methods capable of evaluating wind energy resources in conjunction with variable hydroelectric conditions for the Pacific Northwest electric system (1978)

Electric Industry Restructuring, Competition and Deregulation

- Represented the Hawaii Division of Consumer Advocacy in the PUC investigative docket collaborative on electric industry restructuring, competition and deregulation.
- Presented testimony to the Hawaii PUC recommending establishment of a process for competitive bidding for new wholesale generation to complement the Hawaii Integrated Resource Planning process (1991)

OCCUPATION

1991 - 2007	Consultant, Sole Proprietor: dba Haiku Design and Analysis Public Utility Regulatory Affairs Integrated Resource Planning Energy Resource Economic Analysis
2003 - 2007	Chair, Regulatory Reform Work Group Hawaii Energy Policy Forum
1991 - 2001	Hawaii IRP Advisory Group Representative Division of Consumer Advocacy Department of Commerce and Consumer Affairs State of Hawaii
1999 - 2000	Member, Subcommittee on Alternate Energy and Conservation Maui County Council
1989 - 2002	President, Administrator Blue Ocean Preservation Society, Haiku, Hawaii.

- 1990 - 1991 Hawaii Public Utilities Commission Integrated Resource Planning
Collaborative Participant
- 1979 - 1981 Participant Representing the State of Oregon
Energy Forecasting Delphi/Monte Carlo Pool
Pacific Northwest Utilities Conference Committee
- 1977 - 1987 Partner, Analyst on Utility Economics and Policy
Forelaws On Board,
Boring, Oregon.

FORMAL EDUCATION

- 1970 - 1973 Reed College, Portland, Oregon

CONTESTED CASE SWORN WRITTEN TESTIMONY

- 1977 Before the Nuclear Regulatory Commission, AS&LB;
Testimony regarding the economics of the Pacific Northwest electrical
generating system.
- 1978 Before the Oregon Energy Facility Siting Council;
Testimony analyzing the energy forecasts of Portland General Electric,
Pacific Power and Light and Puget Sound Power and Light Companies.
Included a twenty year energy forecast for Pacific Power and Light.
- 1978 Before the Oregon Energy Facility Siting Council;
Testimony regarding the availability and cost of wind turbine generation
including an hourly analysis of regional wind speed data utilizing a
production cost model for the Pacific Northwest Region over a twenty-
year period.
- 1978 Before the Oregon Energy Facility Siting Council;
Testimony on the comparative costs of over- and under-building resources
including a probabilistic analysis of costs for the Pacific Northwest system
under various load growth, resource expansion and hydroelectric
availability scenarios.
- 1979 Before the Public Utilities Commissioner of Oregon;
Testimony regarding the expected value of voluntary conservation
measures typically made during adverse hydroelectric conditions in the
Pacific Northwest.
- 1991 Before the Public Utilities Commission of Hawaii;
Testimony regarding a proposed framework for an Integrated Resource
Planning process for Hawaii's energy utilities.
Docket No. 6617.

- 1993 Before the Public Utilities Commission of Hawaii;
Testimony evaluating GASCO's Integrated Resource Plan application and
representing the position of the Consumer Advocate. Docket No. 7261
- 1993 Before the Public Utilities Commission of Hawaii;
Testimony evaluating Hawaiian Electric Company's Integrated Resource
Plan application and representing the position of the Consumer Advocate.
Docket No. 7257
- 1994 Before the Public Utilities Commission of Hawaii;
Testimony evaluating Kauai Electric Division's Integrated Resource Plan
application and representing the position of the Consumer Advocate.
Docket No. 7260
- 1994 Before the Public Utilities Commission of Hawaii;
Testimony evaluating Maui Electric Company's Integrated Resource Plan
application and representing the position of the Consumer Advocate.
Docket No. 7258
- 1994 Before the Public Utilities Commission of Hawaii;
Testimony evaluating Hawaii Electric Light Company's Integrated
Resource Plan application and representing the position of the Consumer
Advocate. Docket No. 7259
- 1994 Before the Public Utilities Commission of Hawaii;
Testimony evaluating Hawaiian Electric Company's Commercial
Demand-Side Management Programs. Docket No. 94-0010
- 1995 Before the Public Utilities Commission of Hawaii;
Testimony regarding generation efficiency, fuel expense, fuel cost
adjustment methods and need for new generation in Maui Electric
Company's rate case. Docket No. 94-0345
- 1995 Before the Public Utilities Commission of Hawaii;
Testimony regarding generation efficiency, fuel expense, purchased power
capacity and energy costs, fuel cost adjustments and the need for new
generation in Hawaii Electric Power & Light's rate case. Docket No. 94-
0140.
- 2000 Before the Public Utilities Commission of Hawaii;
Testimony regarding wind generation capacity value and contribution to
utility system reliability considering Apollo Energy Co. Purchased Power
Agreement with Hawaii Electric Power & Light. Docket No. 00-0135

- 2006 Before the Public Utilities Commission of Hawaii;
 Testimony regarding administration and financial mechanisms for utility
 and third party implementation of Demand Side Management programs
 for the State of Hawaii

TESTIMONY IN FORMAL RULEMAKING PROCEEDINGS
RE: UTILITY RESOURCE PLANNING

- 1979-82 Before the Oregon Energy Facility Siting Council;
 "Need for Power" Standards for large energy facilities. Participated as one
 of the primary crafters of the adopted language. This was one of the first
 resource planning rules to explicitly incorporate conservation as a utility
 resource.
- 1979-80 Before the Oregon Energy Facility Siting Council;
 "Specific Standards for Siting Wind Facilities." Participated as a primary
 crafter of the adopted language.
- 1979-84 Before the Oregon Energy Facility Siting Council;
 Testimony regarding the various Specific Standards adopted for Biomass,
 Cogeneration, Geothermal and Coal facilities.
- 1989 Before the Hawaii Dept. of Land and Natural Resources;
 Testimony regarding "Geothermal and Cable System Development"

MATTHEW I. KAHAL
SUMMARY QUALIFICATIONS ON
POWER SUPPLY PLANNING
AND COMPETITIVE PROCUREMENT

Overview of Activities

Much of Mr. Kahal's professional consulting work over the past 25 years has involved the planning, certification and financing of new power plant projects, along with regulatory approvals of long-term purchase power contracts. This has included issues of environmental compliance for power plants. During the 1980s and 1990s, he supervised an economics consulting team assisting the Maryland Department of Natural Resources (DNR) in planning for and certifying the proposed power plant projects in the State. During this time period, he evaluated and testified on numerous long-term purchase power contracts primarily involving Qualifying Facilities (QFs), with this work undertaken on behalf of various state public utility commissions, consumer advocacy offices, and a major cogeneration developer.

Mr. Kahal's work in recent years has focused on evaluation of power plant asset sales/purchases, the design of utility RFPs for purchasing power supplies (in both a regulated, vertically-integrated setting and restructured), and environmental compliance. His recent and current clients in this area include:

- Pennsylvania Office of Consumer Advocate
- New Jersey Rate Counsel
- U.S. Department of Justice/Environmental Protection Agency
- Louisiana Public Service Commission
- Maryland Energy Administration/Department of Natural Resources

- U.S. Department of Energy

Recent Activities (within past five years)

- Assisted the U.S. Department of Justice on various Clean Air Act compliance cases, including assessing the economic and financial viability of installing emissions controls at coal-fired power plants.
- Assisted the State of New Jersey (Division of Rate Counsel) in evaluating several proposed power plant sales by utilities (coal and peaking plants) as part of industry restructuring. This has involved a review of competitive auctions or similar processes conducted by utilities and asset valuations.
- Assisted the New Jersey Rate Counsel in several cases involving restructurings, buyouts or reforms of existing long-term QF purchase power contracts.
- Represented the Maryland State Agencies in the development of the framework and protocols used by the State's electric utilities to procure full requirements power for Provider of Last Resort (POLR) service. (Maryland deregulated utility generation in 2000.)
- Was the primary author of the Commission Staff report and rules adopted by the Louisiana Public Service Commission (LPSC) mandating competitive procurement (i.e., RFPs) for new power supplies. Also served as Commission consultant on developing Commission rules for QF capacity contracts and the setting of "avoided cost" rates.

- Served as the LPSC Staff consultant on numerous RFPs conducted by Louisiana electric utilities (2002 to the present), including the Entergy Corporation operating companies, SWEPCO (an American Electric Power subsidiary) and Cleco Power. These RFPs have led to the acquisition by these utilities of thousands of MWs of capacity contracts (both intermediate and long-term), power plant asset purchases and several major utility "self-build" projects. Mr. Kahal also served as Staff witness for the certification of these contracts, asset purchases and plant construction.

MATTHEW I. KAHAL

Mr. Kahal is currently an independent consulting economist, specializing in energy economics, public utility regulation and financial analysis. Over the past two decades, his work has encompassed electric utility integrated resource planning (IRP), power plant licensing and a wide range of utility financial issues. In the financial area he has conducted numerous cost of capital studies and addressed other financial issues for electric, gas, telephone and water utilities. Mr. Kahal's work in recent years has shifted to electric utility restructuring, mergers and competition.

Mr. Kahal has provided expert testimony on more than 250 occasions before state and federal regulatory commissions and the U.S. Congress. His testimony has covered need for power, integrated resource planning, cost of capital, purchased power practices and contracts, merger economics, industry restructuring and various other regulatory policy issues.

Education:

B.A. (Economics) - University of Maryland, 1971.

M.A. (Economics) - University of Maryland, 1974.

Ph.D. candidate - University of Maryland, completed all course work
and qualifying examinations.

Previous Employment:

1981-2001 - Exeter Associates, Inc. (founding Principal).

1980-1981 - Member of the Economic Evaluation Directorate, The Aerospace Corporation, Washington, D.C. office.

1977-1980 - Economist, Washington, D.C. consulting firm.

1972-1977 - Research/Teaching Assistant and Instructor, Department of Economics, University of Maryland (College Park).

1975-1977 - Lecturer in Business/Economics, Montgomery College.

Professional Work Experience:

Mr. Kahal has more than twenty years experience managing and conducting consulting assignments relating to public utility economics and regulation. In 1981, he and five colleagues founded the firm of Exeter Associates, Inc. and for the next 20 years he served as a Principal and corporate officer in the firm. During that time, he supervised multi-million dollar support contracts with the State of Maryland and directed the technical work conducted both by Exeter professional staff and numerous subcontractors. Additionally, Mr. Kahal took the lead role at

Exeter in consulting to the firm's other governmental and private clients in the areas of financial analysis, utility mergers, electric restructuring and utility purchase power contracts.

At the Aerospace Corporation, Mr. Kahal served as an economic consultant to the Strategic Petroleum Reserve (SPR). In that capacity he participated in a detailed financial assessment of the SPR, and developed an econometric forecasting model of U.S. petroleum industry inventories. That study has been used to determine the extent to which private sector petroleum stocks can be expected to protect the U.S. from the impacts of oil import interruptions.

Before entering consulting, Mr. Kahal held faculty positions with the Department of Economics at the University of Maryland and with Montgomery College teaching courses on economic principles, business and economic development.

Publications and Consulting Reports:

Projected Electric Power Demands of the Baltimore Gas and Electric Company, Maryland Power Plant Siting Program, 1979.

Projected Electric Power Demands of the Allegheny Power System, Maryland Power Plant Siting Program, January 1980.

An Econometric Forecast of Electric Energy and Peak Demand on the Delmarva Peninsula, Maryland Power Plant Siting Program, March 1980 (with Ralph E. Miller).

A Benefit/Cost Methodology of the Marginal Cost Pricing of Tennessee Valley Authority Electricity, prepared for the Board of Directors of the Tennessee Valley Authority, April 1980.

An Evaluation of the Delmarva Power and Light Company Generating Capacity Profile and Expansion Plan, (Interim Report), prepared for the Delaware Office of the Public Advocate, July 1980, (with Sharon L. Mason).

Rhode Island-DOE Electric Utilities Demonstration Project, Third Interim Report on Preliminary Analysis of the Experimental Results, prepared for the Economic Regulatory Administration, U.S. Department of Energy, July 1980.

Petroleum Inventories and the Strategic Petroleum Reserve, The Aerospace Corporation, prepared for the Strategic Petroleum Reserve Office, U.S. Department of Energy, December 1980.

Alternatives to Central Station Coal and Nuclear Power Generation, prepared for Argonne National Laboratory and the Office of Utility Systems, U.S. Department of Energy, August 1981.

"An Econometric Methodology for Forecasting Power Demands," Conducting Need-for-Power Review for Nuclear Power Plants (D.A. Nash, ed.), U.S. Nuclear Regulatory Commission, NUREG-0942, December 1982.

State Regulatory Attitudes Toward Fuel Expense Issues, prepared for the Electric Power Research Institute, July 1983, (with Dale E. Swan).

"Problems in the Use of Econometric Methods in Load Forecasting," Adjusting to Regulatory, Pricing and Marketing Realities (Harry Trebing, ed.), Institute of Public Utilities, Michigan State University, 1983.

Proceedings of the Maryland Conference on Electric Load Forecasting, (editor and contributing author), Maryland Power Plant Siting Program, PPES-83-4, October 1983.

"The Impacts of Utility-Sponsored Weatherization Programs: The Case of Maryland Utilities," (with others), in Government and Energy Policy (Richard L. Itteilag, ed.), 1983.

Power Plant Cumulative Environmental Impact Report, contributing author, (Paul E. Miller, ed.) Maryland Department of Natural Resources, January 1984.

Projected Electric Power Demands for the Potomac Electric Power Company, three volumes with Steven L. Estomin), prepared for the Maryland Power Plant Siting Program, March 1984.

"An Assessment of the State-of-the-Art of Gas Utility Load Forecasting," (with Thomas Bacon, Jr. and Steven L. Estomin), published in the Proceedings of the Fourth NARUC Biennial Regulatory Information Conference, 1984.

"Nuclear Power and Investor Perceptions of Risk," (with Ralph E. Miller), published in The Energy Industries in Transition: 1985-2000 (John P. Weyant and Dorothy Sheffield, eds.), 1984.

The Financial Impact of Potential Department of Energy Rate Recommendations on the Commonwealth Edison Company, prepared for the U.S. Department of Energy, October 1984.

"Discussion Comments," published in Impact of Deregulation and Market Forces on Public Utilities: The Future of Regulation (Harry Trebing, ed.), Institute of Public Utilities, Michigan State University, 1985.

An Econometric Forecast of the Electric Power Loads of Baltimore Gas and Electric Company, two volumes (with others), prepared for the Maryland Power Plant Siting Program, 1985.

A Survey and Evaluation of Demand Forecast Methods in the Gas Utility Industry, prepared for the Public Utilities Commission of Ohio, Forecasting Division, November 1985, (with Terence Manuel).

A Review and Evaluation of the Load Forecasts of Houston Lighting & Power Company and Central Power & Light Company -- Past and Present, prepared for the Texas Public Utility Commission, December 1985, (with Marvin H. Kahn).

Power Plant Cumulative Environmental Impact Report for Maryland, principal author of three of the eight chapters in the report (Paul E. Miller, ed.), PPSP-CEIR-5, March 1986.

"Potential Emissions Reduction from Conservation, Load Management, and Alternative Power," published in Acid Deposition in Maryland: A Report to the Governor and General Assembly, Maryland Power Plant Research Program, AD-87-1, January 1987.

Determination of Retrofit Costs at the Oyster Creek Nuclear Generating Station, March 1988, prepared for Versar, Inc., New Jersey Department of Environmental Protection.

Excess Deferred Taxes and the Telephone Utility Industry, April 1988, prepared on behalf of the National Association of State Utility Consumer Advocates.

Toward a Proposed Federal Policy for Independent Power Producers, comments prepared on behalf of the Indiana Consumer Counselor, FERC Docket EL87-67-000, November 1987.

Review and Discussion of Regulations Governing Bidding Programs, prepared for the Pennsylvania Office of Consumer Advocate, June 1988.

A Review of the Proposed Revisions to the FERC Administrative Rules on Avoided Costs and Related Issues, prepared for the Pennsylvania Office of Consumer Advocate, April 1988.

Review and Comments on the FERC NOPR Concerning Independent Power Producers, prepared for the Pennsylvania Office of Consumer Advocate, June 1988.

The Costs to Maryland Utilities and Ratepayers of an Acid Rain Control Strategy -- An Updated Analysis, prepared for the Maryland Power Plant Research Program, October 1987, AD-88-4.

"Comments," in New Regulatory and Management Strategies in a Changing Market Environment (Harry M. Trebing and Patrick C. Mann, editors), Proceedings of the Institute of Public Utilities Eighteenth Annual Conference, 1987.

Electric Power Resource Planning for the Potomac Electric Power Company, prepared for the Maryland Power Plant Research Program, July 1988.

Power Plant Cumulative Environmental Impact Report for Maryland (Thomas E. Magette, ed.) authored two chapters, November 1988, PPRP-CEIR-6.

Resource Planning and Competitive Bidding for Delmarva Power & Light Company, October 1990, prepared for the Maryland Department of Natural Resources (with M. Fullenbaum).

Electric Power Rate Increases and the Cleveland Area Economy, prepared for the Northeast Ohio Areawide Coordinating Agency, October 1988.

An Economic and Need for Power Evaluation of Baltimore Gas & Electric Company's Perryman Plant, May 1991, prepared for the Maryland Department of Natural Resources (with M. Fullenbaum).

The Cost of Equity Capital for the Bell Local Exchange Companies in a New Era of Regulation, October 1991, presented at the Atlantic Economic Society 32nd Conference, Washington, D.C.

A Need for Power Review of Delmarva Power & Light Company's Dorchester Unit 1 Power Plant, March 1993, prepared for the Maryland Department of National Resources (with M. Fullenbaum)

The AES Warrior Run Project: Impact on Western Maryland Economic Activity and Electric Rates, February 1993, prepared for the Maryland Power Plant Research Program (with Peter Hall).

An Economic Perspective on Competition and the Electric Utility Industry, November 1994. Prepared for the Electric Consumers' Alliance.

PEPCO's Clean Air Act Compliance Plan: Status Report, prepared for the Maryland Power Plant Research Plan, January 1995 (w/Diane Mountain, Environmental Resources Management, Inc.).

The FERC Open Access Rulemaking: A Review of the Issues, prepared for the Indiana Office of Utility Consumer Counselor and the Pennsylvania Office of Consumer Advocate, June 1995.

A Status Report on Electric Utility Restructuring: Issues for Maryland, prepared for the Maryland Power Plant Research Program, November 1995 (with Daphne Psacharopoulos).

Modeling the Financial Impacts on the Bell Regional Holding Companies from Changes in Access Rates, prepared for MCI Corporation, May 1996.

The CSEF Electric Deregulation Study: Economic Miracle or the Economists' Cold Fusion?, prepared for the Electric Consumers' Alliance, Indianapolis, Indiana, October 1996.

Reducing Rates for Interstate Access Service: Financial Impacts on the Bell Regional Holding Companies, prepared for MCI Corporation, May 1997.

The New Hampshire Retail Competition Pilot Program: A Preliminary Evaluation, July 1997, prepared for the Electric Consumers' Alliance (with Jerome D. Mierzwa).

Electric Restructuring and the Environment: Issue Identification for Maryland, March 1997, prepared for the Maryland Power Plant Research Program (with Environmental Resource Management, Inc.)

An Analysis of Electric Utility Embedded Power Supply Costs, prepared for Power-Gen International Conference, Dallas, Texas, December 1997.

Market Power Outlook for Generation Supply in Louisiana, December 2000, prepared for the Louisiana Public Service Commission (with others).

A Review of Issues Concerning Electric Power Capacity Markets, prepared for the Maryland Power Plant Research Program, December 2001 (with B. Hobbs and J. Inon).

The Economic Feasibility of Air Emissions Controls at the Brandon Shores and Morgantown Coal-fired Power Plants, February 2005, (prepared for the Chesapeake Bay Foundation).

The Economic Feasibility of Power Plant Retirements on the Entergy System, September 2005 with Phil Hayet (prepared for the Louisiana Public Service Commission).

Expert Report on Capital Structure, Equity and Debt Costs, prepared for the Edmonton Regional Water Customers Group, August 30, 2006.

Maryland's Options to Reduce and Stabilize Electric Power Prices Following Restructuring, with Steven L. Estomin, prepared for the Power Plant Research Program, Maryland Department of Natural Resources, September 2006.

Conference and Workshop Presentations:

Workshop on State Load Forecasting Programs, sponsored by the Nuclear Regulatory Commission and Oak Ridge National Laboratory, February 1982 (presentation on forecasting methodology).

Fourteenth Annual Conference of the Michigan State University Institute for Public Utilities, December 1982 (presentation on problems in forecasting).

Conference on Conservation and Load Management, sponsored by the Massachusetts Energy Facilities Siting Council, May 1983 (presentation on cost-benefit criteria).

Maryland Conference on Load Forecasting, sponsored by the Maryland Power Plant Siting Program and the Maryland Public Service Commission, June 1983 (presentation on overforecasting power demands).

The 5th Annual Meetings of the International Association of Energy Economists, June 1983 (presentation on evaluating weatherization programs).

The NARUC Advanced Regulatory Studies Program (presented lectures on capacity planning for electric utilities), February 1984.

The 16th Annual Conference of the Institute of Public Utilities, Michigan State University (discussant on phase-in and excess capacity), December 1984.

U.S. Department of Energy Utilities Conference, Las Vegas, Nevada (presentation of current and future regulatory issues), May 1985.

The 18th Annual Conference of the Institute of Public Utilities, Michigan State University, Williamsburg, Virginia, December 1986 (discussant on cogeneration).

The NRECA Conference on Load Forecasting, sponsored by the National Rural Electric Cooperative Association, New Orleans, Louisiana, December 1987 (presentation on load forecast accuracy).

The Second Rutgers/New Jersey Department of Commerce Annual Conference on Energy Policy in the Middle Atlantic States, Rutgers University, April 1988 (presentation on spot pricing of electricity).

The NASUCA 1988 Mid-Year Meeting, Annapolis, Maryland, June 1988, sponsored by the National Association of State Utility Consumer Advocates (presentation on the FERC electricity avoided cost NOPRs).

The Thirty Second Atlantic Economic Society Conference, Washington, D.C., October 1991 (presentation of a paper on cost of capital issues for the Bell Operating Companies).

The NASUCA 1993 Mid-Year Meeting, St. Louis, Missouri, sponsored by the National Association of State Utility Consumer Advocates, June 1993 (presentation on regulatory issues concerning electric utility mergers).

The NASUCA and NARUC annual meetings in New York City, November 1993 (presentations and panel discussions on the emerging FERC policies on transmission pricing).

The NASUCA annual meetings in Reno, Nevada, November 1994 (presentation concerning the FERC NOPR on stranded cost recovery).

U.S. Department of Energy Utilities/Energy Management Workshop, March 1995 (presentation concerning electric utility competition).

The 1995 NASUCA Mid-Year Meeting, Breckenridge, Colorado, June 1995, (presentation concerning the FERC rulemaking on electric transmission open access).

The 1996 NASUCA Mid-Year Meeting, Chicago, Illinois, June 1996 (presentation concerning electric utility merger issues).

Conference on "Restructuring the Electric Industry," sponsored by the National Consumers League and Electric Consumers Alliance, Washington, D.C., May 1997 (presentation on retail access pilot programs).

The 1997 Mid-Atlantic Conference of Regulatory Utilities Commissioners (MARUC), Hot Springs, Virginia, July 1997 (presentation concerning electric deregulation issues).

Power-Gen '97 International Conference, Dallas, Texas, December 1997 (presentation concerning utility embedded costs of generation supply).

Consumer Summit on Electric Competition, sponsored by the National Consumers League and Electric Consumers' Alliance, Washington, D.C., March 2001 (presentation concerning generation supply and reliability).

National Association of State Utility Consumer Advocates, Mid-Year Meetings, Austin, Texas, June 16-17, 2002 (presenter and panelist on RTO/Standard Market Design issues).

Louisiana State Bar Association, Public Utility Section, October 2, 2002. (Presentation on Performance-Based Ratemaking and panelist on RTO issues). Baton Rouge, Louisiana.

Virginia State Corporation Commission/Virginia State Bar, Twenty Second National Regulatory Conference, May 10, 2004. (Presentation on Electric Transmission System Planning.) Williamsburg, Virginia.

**RELEVANT EXPERIENCE OF BARRY J. SHEINGOLD,
NEW ENERGY OPPORTUNITIES, INC.**

Barry Sheingold, President of New Energy Opportunities, Inc. (NEO), has over 20 years of experience in the design and structuring of long-term contracts for the purchase and sale of electric power, the design of competitive procurements, evaluating bids, and oversight of competitive procurements. Mr. Sheingold was formerly Senior Vice President of Citizens Power LLC, the nation's pioneering electric power marketing company, where he also served as General Counsel. Previously, Mr. Sheingold worked for an electric utility, a power plant development company and the Federal Energy Regulatory Commission. He is a graduate of Boston College Law School and New College.

Mr. Sheingold has played a variety of important roles in competitive procurement processes. Currently, he is leading a consulting team that was retained by four Delaware state agencies in the oversight of the design of an RFP and bid evaluation for long-term power purchases from new generating facilities in Delaware. In 2003, Mr. Sheingold was the principal consultant responsible for the conceptual and detailed design for the Massachusetts Technology Collaborative's competitive bidding program for the procurement of renewable energy certificates, and options on renewable energy certificates, under long-term contracts. The purpose of this program—the Massachusetts Green Power Partnership—is to provide financing support for new renewable generation facilities in a competitive, deregulated market. In addition, Mr. Sheingold was the principal consultant in developing the economic evaluation criteria, evaluating the bids from an economic perspective, and advising on contract negotiations with the winning bidders.

Mr. Sheingold has also advised the New York State Energy Research and Development Authority (NYSERDA) in its program of procuring generation attributes from renewable energy projects under long-term contracts in implementing the New York Renewable Portfolio Standard. In addition, he has advised a variety of private clients regarding competitive procurements. With counsel, he developed and implemented a competitive procurement process, resulting in a 12-year power purchase contract following the bankruptcy of a previous supplier. Other engagements have included assistance in bid evaluation for potential buyers (Portland General Electric and Town of Fairhaven), providing expert testimony (Hydro Quebec Distribution), development and implementation of a "reverse RFP" for a wind energy developer (Steel Winds), and supplying advice to a bidder in a long-term capacity procurement RFP (Inland Empire).

At Citizens Power, Mr. Sheingold specialized in long-term contracts between generators and utilities and the restructuring of those contracts, working for both buyers and sellers and for Citizens Power acting as a principal. He advised clients in a variety of competitive power procurements in Massachusetts, Oregon, New

Jersey, Delaware, Indiana, California, Maryland, Nevada and elsewhere. He founded NEO in 2000, where he has assisted public and private clients in structuring long-term power contracts and procurements to support financing of new generation facilities and in the implementation and oversight of such procurements.

Depending on the nature of the assignment, New Energy Opportunities may retain subcontractors on an as needed basis. Potential subcontractors include Donald S. McCauley of McCauley & Lyman LLC, an experienced power contracts attorney, and Richard C. Gross, P.E., an electrical engineer with considerable expertise and experience in interconnection and transmission issues.

Resumes of Messrs. Sheingold, McCauley and Gross have been provided separately.

BARRY J. SHEINGOLD
125 Powers Road
Sudbury, Massachusetts 01776
(O) 978-440-7575 / (H) 978-443-9562

Summary:

A creative and highly competent professional in the electric power business, with extensive commercial, analytical, legal and regulatory experience in power procurement, power marketing, power contracting, renewable energy, project finance, and power plant development. Outstanding problem solving abilities involving complex commercial, financial, and institutional issues.

Professional History

NEW ENERGY OPPORTUNITIES, INC.

2000-Present

President

Founded company devoted to achieving objectives of clients through the structuring and effectuation of electric power transactions. Successes include conduct of a competitive power procurement resulting in a 12-year power purchase contract, the structuring of competitive bids for the purchase of renewable energy certificates and other market price risk hedging products, negotiating long-term contracts for the sale of energy and environmental attributes from proposed wind farms in New York and New England, contract negotiation and due diligence assistance on over 1,000 MW of proposed power plants that have been built, and the closing of a major power contract restructuring involving a debt swap, power contract buydown, and assignments of power contracts and a gas swap. Currently, responsible for the oversight of a competitive procurement by Delmarva Power for long-term power purchases from new generation to be built in Delaware on behalf of four Delaware state agencies.

CITIZENS POWER, L.L.C.

1997-2000

Senior Vice President—Business Development

Created substantial value through efforts in restructuring and optimizing long-term power contracts held by Citizens Power. Responsible for a variety of other activities, including power contract auctions, assessment of retail marketing initiatives and restructurings involving use of securitized and/or tax-exempt debt.

Senior Vice President—PowerFuels

Initiated and co-led effort with coal company affiliate to foster coal/power convergence transactions and restructure coal contracts, resulting in a substantial increase in corporate earnings.

CITIZENS LEHMAN POWER L.L.C.

1994-1997

Senior Vice President

Head of fuels marketing business and member of company's operating committee. Played lead role in negotiating 20-year Orimulsion® fuel supply contract and associated flue gas desulfurization service agreement in connection with planned conversion of 1,600 MW oil-fired plant—the contracts were tailored to support two

financings totaling \$500 million. Developed plan for joint venture with coal company which led to sale of Citizens Lehman Power to The Energy Group on favorable terms.

CITIZENS POWER & LIGHT COPORATION

1989-1994

Vice President and General Counsel

Developed model for power marketing relationships with non-utility generators that helped make a flagging start-up company profitable within one year of arrival. Helped create *Citizens Power* precedent at the Federal Energy Regulatory Commission for market-based regulation of power marketers and independent power producers. Played a key role in structuring winning competitive bids for incremental generating capacity for non-utility generator customers. Developed first electric utility/power marketer co-marketing relationship in the United States.

DELMARVA CAPITAL TECHNOLOGY COMPANY

1986 - 1989

Senior Counsel

Served as chief counsel in the development and financing of two biomass power plant projects and the acquisition of a landfill. Negotiated a quick, favorable settlement of litigation brought by an environmental group that had prevented the project financing of a power plant already in construction—resolved issues using a well-respected environmentalist as facilitator, a novel approach at the time.

DELMARVA POWER & LIGHT COMPANY

1984 - 1989

Senior Counsel

Represented Mid-Atlantic electric/natural gas utility in regulatory proceedings and advised management on non-utility generation and fuel procurement issues. Negotiated favorable settlement of major lawsuit involving breach of coal contract. Assisted in developing the company's first competitive bid for power supplies.

DEPARTMENT OF ENERGY

1980 - 1984

Trial Attorney

Defended DOE regulations and orders involving the agency's energy regulatory programs in federal courts and prosecuted enforcement actions. Was key player in structuring case that resulted in a \$1.7 billion judgment for the government. Undefeated litigation record. Recipient of award for superior performance.

FEDERAL ENERGY REGULATORY COMMISSION

1977 - 1980

Staff Attorney

Prepared and tried complex regulatory cases on the economic, financial, environmental and ratemaking aspects of proposed natural gas pipeline projects, including the Alaskan Gas Pipeline Project. Clerked for administrative law judges.

Education:

J.D., Boston College Law School, Newton, MA, 1977, *cum laude*
B.A., American History, New College, Sarasota, FL, 1974

DONALD S. MCCAULEY
10 Speen Street, Framingham Massachusetts 01701
Tel 508-665-5801 Fax 508-665-5858 Email donmccauley@mccauleylyman.com

EMPLOYMENT HISTORY

McCauley Lyman LLC; Framingham, MA October 2001 - present
Principal

Private practice focusing on energy law and commercial law matters including: power contracting; project development; renewable energy; power contract restructuring; bankruptcy reorganizations; partnership, limited liability company and corporate formation and governance; sales and acquisitions; project due diligence; renewable attribute trading; and FERC regulatory initiatives including interconnection rulemaking working groups. Arbitrator and expert witness in power contract disputes.

Minuteman Wind, LLC 2004 - present
President
Developer of wind powered electric plants in New England

Edison Mission Marketing & Trading, Inc.; Boston, MA September 2000 - October 2001
Regional Vice President and Counsel

Structured asset restructuring transactions; reviewed tolling transactions and other project development opportunities; evaluated joint ventures; reviewed and negotiated power supply agreements under UK New Electricity Trading Arrangements.

Citizens Power LLC; Denver CO and Boston MA January 1995 - August 2000
Senior Vice President and General Counsel

Chief legal officer of company engaged in wholesale electricity trading and power contract restructuring. Managed legal department of eight lawyers and extensive network of outside counsel. Led transaction team responsible for closing of ten restructuring transactions. These transactions replaced power, fuel and project financing arrangements for qualifying cogeneration and small power production facilities with new arrangements organized by Citizens subsidiaries and involved new forms of project and structured finance. Supervised power purchase and sales contracts and regulatory matters. Also led transaction team in bids for generation fleets divested by utilities as part of industry restructuring. Participated actively in several sales of the company (first to The Energy Group plc, then to Peabody Group and finally to Edison Mission Energy) as well as leading sale of interests in asset restructuring projects. Coordinated and led due diligence teams and regulatory filings in these transactions. Also responsible for general legal matters of company, including litigation, employment and intellectual property matters.

McDermott, Will & Emery; Washington, DC
Associate 1989 - 1991
Partner 1991 - 1994

A member of the Project Development and Finance Group, with a practice focused on the development and financing of energy, environmental, infrastructure and industrial facilities, both within the US and internationally. Acted as lead project counsel, coordinating all legal aspects of the transactions. Worked

Donald S McCauley

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extensively on a low Btu gas fired electric generation project in Pakistan. Reviewed and assisted on other international projects, including India. Lead counsel in restructuring of power purchase contracts and other project agreements for troubled cogeneration projects. Also involved in merger and acquisition of projects and portfolios, including being lead counsel on sale of portfolio of 400 MW of cogeneration projects. Speaker at numerous conferences including Regulation of Infrastructure Projects at Forbes "Rebuilding America" conference; Overview of BOT projects at American Friends of Turkey annual conference; and Contractual Issues in Performance Testing at American Society of Mechanical Engineers.

Nixon, Hargrave, Devans & Doyle; Washington, DC

Associate

1986 - 1989

Practice focused on project financing of a variety of cogeneration and alternative energy projects throughout the US. First assistant and then lead project counsel responsible for construction, operating, power purchase, fuel supply and financing agreements representing developers, lenders, investors and contracting parties. Supervised and was actively involved in regulatory, tax and environmental aspects of transactions. Many projects involved unique issues such as cleanup of contaminated sites and purchase of offsets.

Doherty, Rumble & Butler, St. Paul, MN

Associate

1982 - 1986

Practiced in all areas of corporate and commercial law, including financing, bankruptcy, real estate, securities, private and public offerings, mergers and acquisitions, for a wide range of clients from individuals to Fortune 500 companies. Also worked for non-profits and cooperatives. Projects included structuring of mixed commercial/residential planned development utilizing alternative energy sources.

EDUCATION

Harvard Law School; Cambridge, MA; J.D. 1982

member of the Environmental Law Society; wrote third year paper on Market Approaches to Air Pollution Control.

Williams College; Williamstown, MA; B.A. 1978, magna cum laude

major in history; also a concentration in math; residential house intramural captain

University College London; London, England;

non-degree student for 1976 to 1977 school year; traveled extensively

Professional

admitted to bar in Massachusetts, Minnesota and the District of Columbia. Member American Bar Association, Energy Bar Association, Massachusetts Bar Association, Minnesota Bar Association and DC Bar Association. Vice Chair of Renewable Energy Resources Committee of ABA Section of Environment Energy and Resources

Community

Member of the Planning Board for the Town of Wellesley, Past member of the Town's Advisory Committee

RICHARD C. GROSS P.E., INC.
RENEWABLE ENERGY PLANNING

RESUME OF RICHARD C. GROSS

SUMMARY

An electrical power systems engineer specializing in the conceptual design, interconnection, and analysis of distributed energy projects. Comprehensive background in the electric utility industry gained through more than 25 years of power system planning and electrical design of electrical substations, transmission interconnections, and distribution systems. Ongoing projects include technical analysis and feasibility studies related to the integration of generation projects to high voltage electric utility and other facility electrical systems. Mr. Gross is a Licensed Professional Engineer in the states of Massachusetts and New York.

RELEVANT PROJECT EXPERIENCE

- Prepared the 69 kV electrical interconnection plan for the Heritage Sustainable Energy, LLC 20 MW wind power project near Cadillac, Michigan. Coordinated the preparation of the PSS/E model for the wind turbine generator and reviewed generator starting characteristics for the transient stability and voltage flicker analysis. Performed Owner's Engineer review of the system impact and detailed facility studies prepared by MISO and the transmission owner. Reviewed the Large Generator Interconnection Agreement and provided technical support for Appendix A.
- Prepared the 115 kV electrical interconnection plan and application for the Steel Winds 19.9 MW wind farm in operation and the 60 MW Steel Winds 2 wind farm under development on the shore of Lake Erie in Lackawanna, NY. Performed Owner's Engineer review to determine the interconnection capability of the existing 115 kV – 13.8 kV substation and provided technical assistance during the construction of the 19.9 MW wind farm. Participated in scoping meeting and system impact study conference calls with the NY ISO and the transmission owner for both projects. Performed site review for the design of the 13.8 kV collection system, calculated collection system impedances, and assembled wind turbine generator system modeling information for the system impact studies.
- Electrical load flow and transmission interconnection analysis to identify the generation interconnection capacity of the 115 kV and 230 kV transmission facilities located within 10 miles of the Lake Erie shore in New York for the interconnection of Offshore Wind Farms in Lake Erie.
- Performed load flow and contingency analyses of high voltage transmission systems, identified transmission interconnection options, and quantified interconnection costs for wind farms ranging from 50 MW to 400 MW. Evaluated load flow performance, identified pre-existing overload conditions during contingency cases, and proposed system upgrades or switching procedures to improve system performance.
- Developed electrical interconnection relay and metering one line diagram and the 34.5 kV collection system layout for the Iberdrola USA (Community Energy) 24 MW wind farm to be

Resume of Richard C. Gross

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April 26, 2007

located in Lempster, NH. Prepared project technical data submittal to ISO New England and the Public Service Company of New Hampshire for the project System Impact Study.

- Developed electrical interconnection relay and metering one line diagram and the 23 kV collection system design plans for a 12.5 MW wind farm to be located in Savoy, MA. Prepared the Notice of Intent for Interconnection to Western Massachusetts Electric Company. Performed detailed electrical load flow analysis of the Western Massachusetts Electric Company 23 kV distribution system to evaluate the system impact of the wind farm. The project is in the development phase and is expected to be constructed in 2007.
- Developed the detailed electrical design drawings for the electrical interconnection of a 660 kW wind turbine generator at the Portsmouth Abbey School in Portsmouth, Rhode Island. Project tasks included the preparation of the electrical one line diagram and Notice of Intent for Interconnection to the Narragansett Electric Company 4.16 kV distribution system. Specified the technical details of the major electrical interconnection equipment including the 4.16 kV switchgear and 4.16 kV - 690 volt generator step-up transformer.
- Prepared transmission interconnection feasibility studies, and prepared interconnection applications for wind projects in the NY ISO, PJM, NE ISO, MISO, and SPP control areas. Developed conceptual design plans for the interconnection and collection substations as required by the interconnection procedures.
- Owner's Engineer for the 13.2 kV interconnection of the 3.2 MW Commonwealth Resource Management New Bedford Landfill Gas Generator Project to the NSTAR Electric distribution system. Prepared the Notice of Intent for Interconnection to NSTAR Electric, assembled generator and interconnection equipment details, and prepared the 13.2 kV electrical substation relay and metering one line diagram. Represented the developer during the review of the NSTAR system impact study including the review of NSTAR load flow and short circuit analyses. Provided technical guidance to the developer regarding generator reactive power capabilities and reactive compensation at the interconnection substation. This project is in operation.
- Prepared the electrical interconnection plans for a 1,500 kW wind turbine generator that will be installed at the Jiminy Peak Ski Center in 2007. Prepared the Notice of Intent for Interconnection to Massachusetts Electric Company, assembled generator and interconnection equipment details, and prepared the project relay and metering one line diagram. The wind turbine generator will be interconnected behind the Jiminy Peak electric meter to maximize the economic benefit of the project.
- Project engineer for a wind generation project feasibility study at Varian Semiconductor Equipment Corporation. Tasks included a technical review of the Massachusetts Electric Company 23 kV electrical distribution supply system to Varian and the development of electrical interconnection plans for two (2) 2,000 kW wind turbine generators. Prepared the interconnection system cost estimates and identified specifications for major interconnection equipment. Prepared the Notice of Intent for Interconnection to Massachusetts Electric Company, assembled generator and interconnection equipment details, and prepared the

Resume of Richard C. Gross

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April 26, 2007

project relay and metering one line diagram. Assisted the Owner in the development of the grant application for project construction. The project is in the development phase and is expected to be constructed in 2008.

- Project engineer for the conceptual design of the 400 kV electric utility interconnection substation and 110 kV offshore substation for the 250 MW Slupsk Shoals Offshore Wind Project (Poland) and the conceptual design of the 110 kV interconnection substation for the 60 MW Suwalki Wind Power Project (Poland).
- Evaluated the electrical interconnection design and protective relaying for the interconnection of a 2 MW gas turbine at a dairy in Lynn, Massachusetts and another 2 MW gas turbine at a dairy in Franklin, Massachusetts. Prepared the Notice of Intent to interconnect both projects to Massachusetts Electric Company.
- Project manager and lead engineer for the feasibility study and electrical system impact analysis for three (3) 1.5 MW wind turbine generators at three different interconnection locations on the 24.9 kV distribution system of the Littleton (Massachusetts) Electric Light & Water Department. Coordinated wind resource analysis at three sites and evaluated alternative wind turbine generators for each site. Estimated annual energy production figures for each alternative and calculated the present worth value of the annual cost of generation. Modeled the wind turbine generators for load flow and short circuit analysis and evaluated the impact of the generators on the 24.9 kV electric utility distribution system.
- Project engineer for an electrical interconnection study for a 24 MW wind farm in northern New Hampshire. Performed site review, interconnection routing alternative review, and technical support during discussions with the supplying and adjacent electric utilities. Performed a survey of recent PPA activity on similar projects and evaluated revenue potential from REC sales.
- Project manager and lead electrical engineer for the detailed design, major equipment procurement, and construction/commissioning of 115 kV substations. Prepared relay and metering one line diagrams, three line diagrams, electrical arrangement drawings, control schematics, cable and conduit schedules, substation ground grid design, and lightning shielding design. Supervised civil and structural engineers during preparation of foundation and control house design drawings. Wrote technical specifications for the substation major electrical equipment including 115 kV circuit switchers, 115 kV disconnect switches, 115 kV CCVT's, power transformers, 13.8 kV metalclad switchgear, and 13.8 kV substation capacitor banks. Evaluated major equipment bids and recommended contract award. Reviewed shop drawings for major equipment and coordinated design details. Wrote substation construction specifications, evaluated contractor bids, and recommended award. Projects include the 115 kV and 13.8 kV Expansion of the North Attleborough (Massachusetts) Sherman Substation, replacement of the 115 kV circuit switchers and 23 kV circuit breakers of the Middleton (Massachusetts) Essex Substation, and the 115 kV and 24.5 kV expansion of the Littleton (Massachusetts) Beaver Brook Substation.
- Developed the electrical interconnection plan for ten (10) behind the meter wind power projects under the Massachusetts Technology Collaborative Large Onsite Renewables Initiative (LORI) program in Massachusetts.

Resume of Richard C. Gross

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April 26, 2007

PROFESSIONAL EXPERIENCE

Richard C. Gross P.E., Inc.

2002 – Present

President

Provides professional electrical power engineering services for the design and development of distributed energy projects. Services include project interconnection and integration, feasibility analysis, site screening, technology assessment, project support and project management.

PLM Electric Power Engineering

1987 – 2001

Principal

Co-Founded and developed the company into a 25 person consulting and design firm providing electric system planning and detailed design services for the electric utilities in New York and New England. Project manager and lead engineer on numerous substation projects including the multi-phase expansion of the 115 kV - 69 kV - 13.8 kV supply substation to the North Attleborough Electric Department in Massachusetts. Project manager and lead engineer on the interconnection of numerous distributed generators including the 4.8 kV interconnection of the BFI Landfill Gas Generator Project in Chicopee, Massachusetts and a 250 kW fuel cell at Westover Air Force Base in Massachusetts.

Power Line Models, Inc.

1984 – 1987

Principal Engineer

Project manager and lead engineer for electric utility distribution system planning and design projects at system voltage levels from 4.16 kV through 23 kV. Prepared detailed design plans and construction specifications for distribution supply substations. Prepared technical specifications for power transformers, high voltage circuit breakers, and other major equipment. Performed power quality assessments including the specification and installation of power disturbance analyzers and the development of mitigation measures.

RW Beck and Associates

1980 – 1984

Supervising Engineer

Lead engineer for the load flow and short circuit analysis of the MBTA 13.8 kV transit power supply system and 115 kV - 13.8 kV bulk power supply system in Boston, Massachusetts. Project engineer for the design of the MBTA 115 kV - 13.8 kV bulk power substation. Evaluated protective relay coordination of the 13.8 kV transit power supply system and gas turbine generator.

EDUCATION

M.S., Electrical Engineering, Northeastern University, 1983

B.S., Electrical Engineering, Northeastern University, 1980

Resume of Richard C. Gross

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April 26, 2007

PROFESSIONAL ORGANIZATIONS

Institute of Electrical and Electronics Engineers (IEEE)
American Wind Energy Association (AWEA)
Northeast Energy and Commerce Association (NECA)
Northeast Sustainable Energy Association (NESEA)
National Society of Professional Engineers (NSPE)



ACCION GROUP QUALIFICATIONS

Accion Group is a consortium of experienced consultants focused on providing advice to the utility industry. We specialize in system planning and management, corporate restructuring, regulation and business strategy development and implementation. Headquartered at 244 North Main Street, Concord, New Hampshire 03301-5041, Accion Group has branch offices in suburban Washington, DC, and consulting affiliates nationwide. Accion Group's personnel provide insightful, candid and practical advice and solutions to our clients based on years of hands-on experience in electric, gas, and water utilities, and the government agencies responsible for regulating them. Particularly relevant to this engagement is Accion Group's experience in the following areas:

Independent Evaluation – Power Supply

Accion Group is recognized as one of the premier firms providing independent review of utility procurement practices. Our recent engagements include review of proposals for generation by renewable sources, including:

- Wind
- Solar
- Bio-mass
- Wave action
- How head hydroelectric
- Geothermal
- Methane capture

In addition, we have reviewed proposals for generation by new-build facilities using nuclear, natural gas and coal fuels.

Accion Group has actively participated in the creation and implementation of Renewable Portfolio Standards in a number of states. Included in our experience is development of criteria for meeting the new paradigms for structuring energy supplies, including:

- Balancing the need for reliability and dispatchability with increased reliance on renewable sources
- Rate and tariff designs to encourage renewable development
- Recognizing the benefits and costs of small, diversified resource supply from multiple suppliers
- Valuation and application of Renewable Energy Credits (RECs)
- Criteria for determining the relative value of renewable resources
- The queuing of available sources, and criteria for ranking within queues
- The integration schedule for expanded reliance on renewable resources, both near and long term
- Standards for review and evaluation of the system impact of reliance on renewable resources

Typically, our review includes assessment of impact on rates, transmission and distribution resources, system reliability, and load growth. Issues of siting, licensing, credit-worthiness, contract terms, disposition of responsibility for future credits and obligations, and ownership structuring are frequently addressed before terms for renewable resource procurement are presented to potential suppliers.

Accion Group is well versed in the most recent developments in energy contracting, siting and technology. We will draw upon this knowledge in reviewing energy contractual obligations. A summary of our recent experience is provided in **CHART 1**.

CHART 1
ACCION GROUP RFP EXPERIENCE
AS OF SEPTEMBER 2009

STATE	TERM OF SERVICE (YEARS)	CAPACITY SOUGHT	FUEL SOURCE	INITIAL YEAR
Arizona	Seasonal – 3	2,800 MW	Open	2003
Arizona	Open	Open	Renewable Energy Resources	2006
Arizona	Open	Open	Renewable Energy Resources	2007
Arizona	Open	90 MW	Open	2007
Arizona	10	Open	Renewable Energy Resources	2010
Arizona	25	5, 10, 40, 200, 500 MW	Open - Renewable Resources	2015
Arizona	10 – 20	50,000 MWh	Solar	2015
Florida	5	500 MW	Open	2009
Florida	Open	800 – 1,000 MW	Open	2014
Georgia	7, 15, 21, 30	1,200 MW	Open	2009
Georgia	7, 15, 30	2,000 MW	Open	2010
Georgia	40	1,250 MW (Self-build)	Natural Gas	2011
Georgia	5, 10, 15, 30	1,300 MW	Open	2012
Georgia	5, 10, 15	800 – 1,200 MW	Open	2013-2014
Georgia	40	600 – 1,200 MW	Open - Including Nuclear	2016-2017
Georgia	20	80,000 MWh	Renewable Energy Resources	2011
Hawaii	Open	20-25 MW	Open - Renewable Preferred	2008
Hawaii	Life Cycle	Inter-island Transmission	Wind	TBD
Oregon	5 - 30	1,700 MW	Open - Request for IGCC	2012, 2013, 2014
Oregon	5 - 20	2,000 MW	Open - Without Coal	2010
Oregon	5 - open	410 MW	Open - Renewable Sources	2010-2014
NH	20	24 MW	Wind	2008

Utility Planning and Management

In the area of utility planning and management, Accion members have provided assistance to many clients in strategy development, restructuring complex power supply portfolios and rate setting. This wealth of experience has provided our clients with a broad and unique perspective when they have been involved in these critical decisions. In addition, we have been called upon to advise and assist state regulatory agencies in

situations requiring in-depth understanding of the business issues affecting the utility industry, and for our ability to facilitate negotiations and manage complex transactions.

Action also provides advice on:

- Power portfolio design and analysis
- Resource planning Design and management of generation facilities
- Transmission & distribution planning and evaluation
- Operational management and controls
- Fuel supply management
- Mergers and Acquisitions

Some examples of the areas addressed by our consultants in recent years are the following:

Construction and Operation of Power Plants

Action professionals have been responsible for the construction and operation of power plants in the United States and elsewhere. For example, our consultants have been project managers on power plant construction projects, Chief Operating Officer for a major electric utility, and Comptroller of a major northeast utility.

Procurement and Sale of Power Supplies

Our experience in procurement of wholesale power supply resources is unparalleled. During the past few years, we have assisted in the design, evaluation and final execution of energy and capacity on behalf of governments and private utilities.

Power Supply Contracting and Negotiations

In the power supply solicitations listed above, and on numerous other occasions, our consultants have prepared, critiqued and negotiated long-term power contracts. The terms of these contracts have ranged from two (2) years to forty (40) years and have been for seasonal power, all requirement commitments, and a number of other arrangements.

Utility Management

Our consultants are from the electric utilities and the government entities that regulate the industry. The combined experience permits us to advise clients on all relevant areas, from day to day operation through regulatory approvals and relations. Our consultants have served as General Counsel to a major mid-west electric utility, senior counsel to a major west coast energy services company, Chief Operating Officer of a mid-west electric utility, and CEO of a mid-west distribution company.

Transmission and Distribution System Construction and Operation

Our transmission and distribution professionals have an average of 30 years of individual experience constructing and operating transmission and distribution systems in the US and overseas. Interconnection requirements and responsibilities, which will be needed to expand the City's power supply, will be an important consideration in the review of available options.

Regulation

Accion Group's extensive experience in designing, advocating, and establishing regulatory policy has been called upon frequently by both regulated utilities and by regulators in many jurisdictions. We have assisted regulators in the formulation of regulatory policies and their application in a manner that equitably balances the financial and operational integrity of utilities, and the interests of affected customers. We have advised both regulated utilities and utility regulators on regulatory strategy and compliance. We have also facilitated negotiations among diverse parties in regulatory proceedings, frequently as a representative of a regulator.

Our seasoned professionals have:

- Designed and managed electrical utility generation and delivery systems
- Prepared customer service agreements
- Negotiated service agreements with terms ranging from 3 – 30 years
- Assisted in the development of regulatory policy
- Prepared and advised on Revenue Requirements and Cost of Service studies
- Prepared and designed rate tariffs
- Served as independent evaluators of power supply solicitations
- Prepared and presented expert testimony
- Supported parties in managing regulatory proceedings
- Negotiated case settlements
- Advised regulators and their staffs on complex financial and operational issues

Accion professionals have established reputations for success in guiding parties to resolution of regulatory proceedings, producing results with broad support, and in avoiding protracted and expensive litigation. We have the necessary skills to successfully complete each engagement we undertake. We will collaborate with the NESCOE and TEC in our data analysis and other tasks in order to ensure comprehensive knowledge transfer, training and cost management. If required, we will provide additional support by augmenting our team with researchers and analysts as needed.

Rate Design

Accion Group consultants have advised regulatory commissions and utilities on rate and tariff design issues in many states, including Ohio, Georgia, Florida, Arizona, California, New Hampshire, Pennsylvania, New Jersey, Michigan, Vermont, New York, Connecticut, Massachusetts, Oregon, Nevada, Texas, and New Mexico. Design issues have included assimilation of \$2 billion rate base assets, abandonment of assets, customer class and rate design, time of use and time of day rate structures, seasonal rate designs, and phase-in of assets.

Dispute Resolution

Accion Group consultants have been called upon by regulators and utilities to facilitate resolution of disputes with vendors and customers. These disputes are complex and at times contentious. We have successfully negotiated solutions for complex utility matters, avoiding years of litigation and the associated cost.

Accion Group consultants have extensive experience with evaluating energy and capacity supply, in addition to broad experience in the field of utility regulation, operations, strategy and power supply planning. The following briefly describes several engagements we have accepted that demonstrate the depth and breadth of our ability to successfully complete this assignment.

Our skills in dispute resolution have been honed by extensive experience in crafting agreements between utilities and customers and Accion Group senior personnel have extensive experience with structuring and negotiating customer agreements. For example, Mr. Judd has extensive experience in structuring customer agreements. For example, Harry negotiated the multi-year agreement between an electric utility and over 800,000 customers. That agreement was the cornerstone to resolving a multi-billion dollar bankruptcy. Mr. Layfield assisted in structuring the transfer of assets, as well as serving as advisors on numerous customer service agreements in various jurisdictions. Mr. Noyes has extensive experience as a Chief Financial Officer and Controller who has implemented financial policies, procedures and systems in both the regulated and unregulated utility industry.

PRIOR EXPERIENCE ON CONTRACTS OF SIMILAR SIZE AND SCOPE

Accion Group consultants have extensive experience with competitive procurement of energy and capacity supply, in addition to broad experience in the field of utility regulation, operations, strategy and power supply planning. The following briefly describes several recent engagements we have accepted that demonstrate the depth and breadth of our ability to successfully complete this assignment.

RENEWABLE RESOURCES REVIEW

- **Georgia Public Service Commission.** Accion Group serves as Independent Monitor for the solicitation of 80,000 MWh of electricity from renewable resources, with a particular interest in procuring electricity from solar photovoltaic (PV) sources. Accion Group also serves as Independent Evaluator for the Solicitation of energy and capacity for Georgia Power Company for RFPs with deliveries beginning in 2009, 2010, 2011, 2012, 2014 and 2016. Solicited supplies are for 7, 15 and 30 years. We are responsible for evaluating the appropriateness of the power supply acquisition decisions made by the soliciting companies, including system transmission and infrastructure impacts, and for advising the Georgia PSC on matters relating to product selection, costs, system reliability and competitiveness. Accion designed and operates the web site through which all RFP information is made available to bidders (GPSCIE.com).

Contact:

Commission:

Sheree W. Kernizan
Director, Electric Division
Georgia Public Service Commission
244 Washington Street, S.W.
Atlanta, GA 30334
(404) 656-0994

Utility:

Jeffrey Burleson
Director, Resource Planning
Georgia Power Company
241 Ralph McGill Blvd.
Atlanta, GA 30308
(404) 506-3050

- **Portland General Electric (PGE).** We served as Independent Evaluator for PGE's renewable portfolio RFP. We evaluated all bids and assessed the transmission availability and impact of each bid before producing a ranking of best options available to PGE. Proposals included wind, bio-mass, geothermal, and wave action

generation. Accion designed and maintained the RFP web site for the delivery of information and the receipts of bids.

Contact:

Commission:

Lori Coho, Senior Analyst
Public Utility Commission of Oregon
550 Capitol Street NE, Suite 215
Salem, Oregon 97301-2551
(503) 464-8260

Utility:

Shelly Sayler
Portland General Electric
121 SW Salmon Street
Portland OR 97204
(503) 464-8260

- **Tucson Electric Power Company.** Accion Group has served as Independent Monitor for 5 solicitations for renewable resources by TEP. Presently, we are IM for a solicitation for solar energy and capacity. During 2006 Accion Group assisted Tucson Electric in designing protocols for meeting Arizona's Renewable Energy Standard (RES) and served as Independent Monitor for the resulting solicitation. In 2007 we served as Independent Monitor for a solicitation for a long-term commitment for a new generating facility. We advised the company on solicitation process and design, bidder definition and qualifications, and evaluation standards and protocols. Accion Group assisted in the development of all RFP documents, confirmed compliance with all solicitation and evaluation protocols. Accion Group assisted in designing the evaluation model, and monitored the review of each responsive proposal.

Contact:

Mr. Carmine Tilghman
Tucson Electric Power Company
3950 E. Irvington Road
Mail Stop SC115
Tucson, AZ 85714
520 745 7124

Contact:

Mr. Thomas Hansen
3950 E. Irvington Road
Tucson Electric Power Company
Mail Stop SC115
Tucson, AZ 85714
(928) 337-7322

- **Town of Lempster, NH.** Accion Group represents the host community regarding the construction of a 12-turbine wind project. Our involvement includes addressing all issues concerning siting, transmission, decommissioning, and assessment of economic value of the project.

Contacts:

Town:

Mr. Everett Thurbert
Chairman, Board of Selectmen
Lempster Town Hall
Lempster, NH 03605
(603) 863-9950

Developer:

Jeff Keeler
Iberdrola USA
724 Boston Post Road Ste 205
Madison, CT 06443
(203) 245-0757 (office)

CLIENT LIST:

Accion Group members have also assisted the following clients on a wide variety of engagements:

Regulatory Agencies:

Arizona Corporation Commission
 Federated States of Micronesia
 Federal Trade Commission
 Georgia Public Service Commission
 Illinois Dept. of Nuclear Safety
 Massachusetts Attorney General's Office
 National Electricity Board (Malaysia)
 Nevada Public Utility Commission
 New Hampshire Nuclear Decommissioning Financing Committee
 New Hampshire Attorney General's Office
 New Hampshire Public Utilities Commission
 New Jersey Board of Public Utilities
 New York State Public Service Commission
 Pennsylvania Public Utility Commission
 Public Utility Control Authority of Connecticut
 Public Utility Commission of Oregon
 Trinidad and Tobago Electricity Commission
 United States Department of Energy
 Vermont Department of Public Service
 Vermont Public Service Board

Utilities:

Allegheny Power
 American Electric Power
 Aquila Energy
 Arizona Public Service Company
 Associated Electric
 Baltimore Gas and Electric
 Bay State Gas
 Big Rivers Electric
 Boston Edison
 British Gas-Public Gas Supply
 Cajun Electric Cooperative
 Columbia Gas Transmission Corporation
 Commonwealth Edison Co.
 Central Iowa Power Cooperative
 Central Maine Power
 Central Power and Light
 Colorado-Ute Electric Association
 Consolidated Edison
 Consumers Power
 Detroit Edison
 Dominion Energy
 Duquesne Light Company
 Electricity Supply Commission of South Africa
 El Paso Electric Company
 EnerShop
 Entergy
 Exelon
 Florida Power Corporation
 Florida Power & Light
 Georgia Power Company
 Green Mountain Power Corporation
 Guam Power Authority

Gulf Power
 Hawaiian Electric Company, Inc.
 Houston Lighting and Power
 Hydro Quebec
 Illinois Power
 Indiana Gas
 Jersey Central Power & Light
 Kansas City Power & Light
 KeySpan Energy
 Laclede Gas Company
 MidAmerican Energy
 Mississippi Power & Light
 Missouri Public Service Company
 National Fuel Gas Company
 New Hampshire Electric Cooperative
 New York Power Pool
 Niagara Mohawk Power
 Northeast Electric Board of Great Britain
 Northeast Utilities
 Ohio Power Company
 Ontario Power Generation
 Orlando Utilities Commission
 PacifiCorp
 Pacific Gas and Electric Corporation
 Pennsylvania Power & Light Company
 Piedmont Natural Gas
 Portland General Electric Company
 Public Service Company of NH
 Public Service Electric and Gas
 Public Service of Colorado
 Reliant Energy
 San Diego Gas & Electric
 Saskatchewan Power
 SCANA
 SEMCO Energy Inc.
 Sierra Pacific Power
 South Carolina Electric and Gas
 Southern Electric International
 Southern Indiana Gas and Electric
 Southern NH Water Company, Inc.
 Southwestern Electricity Board (England)
 Tampa Electric Company
 Tennessee Valley Authority
 Texas Electric Utilities
 Tucson Electric Power
 Tri-State Generation and Transmission
 Vermont Electric Cooperative
 Vermont Electric G&T Corporation
 Washington-St. Tammany Cooperative
 Wisconsin Electric Power
 Wisconsin Gas

Other:

Electric Power Research Institute
 Impell Corporation
 LTV Corp
 Lempster, Town of
 National Coal Association
 Neutron Products
 Society to Protect N.H. Forests

RELATED EXPERIENCE

- **Gulf Power Company.** Accion Group served as the Independent Monitor for Gulf Power Company for the company's solicitation of energy and capacity to meet system needs beginning in 2009. Accion Group oversaw the development of Gulf's RFP process and designed and operates a web-based information system for all RFP-related information and was actively involved in the development of all RFP documents. We reviewed all system impact determinations, system reliability impact, and participated in negotiations between individual bidders and Gulf Power.
- **Hawaiian Electric Company, Inc.** Accion is currently assisting Hawaiian Electric as the Independent Observer for the solicitation for service on Maui starting in 2012 and 2014. Establishment of standards for performance and system impact are significant considerations. Accion Group is assisting in review of HECO's participation in the Big Wind Project initiated by the State of Hawaii to design and install transmission service among the islands.
- **PacifiCorp.** Since November 2006, Accion Group has served as Independent Evaluator for the Public Utility Commission of Oregon regarding PacifiCorp's power supply RFPs. In that role we advise the Oregon Public Utilities Commission on the PacifiCorp's decisions relating to base load resources expansion, strategic planning for power supply and delivery, evaluation of the appropriateness of power supply options and cost considerations, cost assessment, supply/customer contracts, and the appropriateness of the energy and capacity choices made by the utility.
- **Public Utilities Commission of Nevada.** We recently advised the Commission Staff on strategic options available to Nevada Electric Utilities in the areas of power supply planning, cost mitigation and financial management. We also assisted the Staff in developing regulatory approaches to managing price volatility in Western merchant markets.
- **BG&E.** We assisted BG&E in the evaluation and negotiation of multi-year power supply contracts entered to facilitate the restructuring required by the Maryland PSC. This analysis covered offers by non-affiliated and affiliated suppliers and focused on reliability of supply, flexibility and financial security.
- **Western Mass Electric.** Served as Independent Evaluator of the contract selection process employed by this regional electric utility. In that role we reviewed the bid RFP, the evaluative criteria used, the negotiations and amendments allowed and the selection rational employed. We also prepared a report for the Mass.DPU in support of the results of the selection process.
- **Green Mountain Power Corp.** We are currently advising this integrated electric utility on strategies for managing its power supply portfolio including strategies for identifying market opportunities to divest non-economic assts and for developing market intelligence.
- **Until Services Corp.** Assisted in the preparation of multiple RFP's for power supplies for affiliated electric distribution companies. Developed product specifications and provided simulation analyses to assist in bid evaluation and contract negotiations.
- **Hydro Quebec.** Advised this major supplier of energy to the New England region on matters relating to disputes with and financial problems regarding the Vermont Joint Owners of the contract to supply energy to Vermont. In that role we assisted HQ in restructuring the required payment schedules and delivery options available.

- **State of New Hampshire re PSNH- 5 Wood Burning Power Plants.** Accion served as technical advisor to the State mediation team in the negotiations to reduce the cost of power being provided to PSNH pursuant to contracts entered into as a result of the adoption of PURPA. Those contracts were reviewed and as a direct result of the State's participation an agreed to plan was adopted which produced a net present value benefit for New Hampshire consumers of more than \$300 million.
- **New Hampshire Electric Cooperative Inc.** Accion consultants served as advisors to the State of New Hampshire during the reorganization during the reorganization in bankruptcy of this Coop. In that role we provided strategic and operational advice regarding the restructuring of the company's indebtedness, its organizational structure, the evaluation of management personnel and their responsibilities, the renegotiation of the power supply agreements of the Coop and in the development and presentation of regulatory reviews of the Coop's rate increase proposals.
- **Vermont Electric Cooperative.** Advised the Cooperative on restructuring and debt reduction, before and during bankruptcy proceedings. Services included the renegotiation of debt, restricting of power and transmission contracts, and the sale of assets.
- **New Hampshire Office of the Attorney General.** Advisor to the Attorney General on utility issues including nuclear decommissioning, power supply matters and transmission access pricing.



HAROLD T. JUDD

Experience:

- Director, Accion Group, Inc.
- Over 30 years' diverse energy industry experience
- Served as counsel for utilities and energy marketers
- Former consumer advocate, federal prosecutor, and state's counsel
- Wholesale purchase power procurement
- Participated in every significant state electric industry restructuring in the United States
- Mergers and acquisitions, utility bankruptcies, regulatory strategy and expert testimony

Major Clients:

- | | |
|--|--|
| • Arizona Corporation Commission | • NH Public Utilities Commission |
| • Federated States of Micronesia | • NJ Board of Public Utilities |
| • Georgia Public Service Commission | • Pacific Gas & Electric Company |
| • Green Mountain Power Corporation | • PacifiCorp |
| • Gulf Power Company | • PG & E Energy Services |
| • Hawaiian Electric Company | • Portland General Electric Company |
| • NH Nuclear Decommissioning Financing Committee | • Public Utilities Commission of Oregon |
| • NH Office of the Attorney General | • Vermont Department of Public Service |
| • NH Office of Consumer Affairs | • Vermont Electric Cooperative |
| | • White House Office of Consumer Affairs |

Related Previous Experience:

- Over 30 years energy industry experience
- Managed nationwide regulatory and legislative deregulation initiatives for two major U.S. public utilities
- Economic development advisor to the president and congress of a newly independent nation
- Adjunct professor of law

Related Functional Experience:

- | | | |
|----------------------------------|----------------------------|--------------------------|
| • Wholesale Resource Procurement | • Electric Market Analysis | • Strategy Management |
| • Mergers and Acquisitions | • Nuclear decommissioning | • Environment Compliance |
| • Regulatory Litigation | • Legislative affairs | • Expert Testimony |
| • Business Restructuring | • Government relations | • Risk Management |
| • Debt Restructuring | • Mediation | |

Education:

- J.D., Franklin Pierce Law Center
- B.A., Political Science, University of Wisconsin – Madison



ALAN KESSLER

Experience:

- Senior Consultant, Accion Group, Inc.
- Partner, Global Energy Practice; Deloitte Consulting
- Advisor to utilities and regulators on corporate and regulatory strategy, business reorganizations and restructurings
- Advisor to utilities on power supply planning and management projects
- Designed fuel and purchased power adjustment clauses in Ohio and New Hampshire
- Participated in approximately 30 fuel and purchased power adjustment clause proceedings

Major Clients:

- | | | |
|-------------------------------------|------------------------------------|---|
| • Aquila Energy | • Georgia Power Company | • PacifiCorp |
| • Arizona Corporation Commission | • Green Mountain Power Corporation | • Portland General Electric Company |
| • BG&E | • Gulf Power Company | • Public Utilities Commission of Oregon |
| • Columbia Gas System | • Kansas City Power & Light | • SEMCO Energy |
| • Dusquesne Light | • Mid American Energy | • Tucson Electric Power Company |
| • Exelon | • NH Public Utilities Commission | • Western Mass Electric |
| • Georgia Public Service Commission | • Ohio Power Company | |

Related Previous Experience:


- Over 30 years energy industry experience
- Management experience with two major U.S. public utilities, and a state public utilities commission
- Experienced in areas of planning, management, and operations analyses
- Advised utilities on financial and operational issues in restructuring energy markets
- Extensive experience in fuels management
- Provided expert testimony in both State and FERC rate and fuel adjustor clause proceedings

Related Functional Experience:

- | | |
|--|----------------------------|
| • Business Restructuring | • Mergers & Acquisitions |
| • Electric & Gas Power Market Analysis | • Synergy Studies |
| • Resource Repositioning | • Cost of Service Analyses |
| • Risk Management | • Expert Testimony |
| • Business Planning | • Regulatory Litigation |
| • Operations Management | • Strategy Management |
| • Debt Restructuring | |

Education:

- B.S., Economics, The City College of New York
- J.D., Capital University School of Law

	
PHILIP B. LAYFIELD	
Experience:	
<ul style="list-style-type: none"> • Independent consultant to the energy industry • Over 30 years electric transmission and distribution experience • Domestic and international transmission design and maintenance • Energy policy design and implementation 	
Major Clients:	
International Clients <ul style="list-style-type: none"> • Guam Power Authority • Hydro Quebec • Ontario Hydro • National Electricity Board (Malaysia) • Trinidad and Tobago Electricity Commission • Electricity Commission of South Africa • North Eastern Electricity Board (England) • South Western Electricity Board (England) 	Domestic Clients <ul style="list-style-type: none"> • Georgia Public Service Commission • Portland General Electric • PacifiCorp • Public Service Electric and Gas • Niagara Mohawk • Illinois Power • Baltimore Gas and Electric • Kansas City Power & Light • Sierra Pacific Power • South Carolina Electric and Gas • Houston Lighting and Power • Colorado-Ute Electric
Related Previous Experience:	
<ul style="list-style-type: none"> • Project manager for multiple electric generation, transmission and distribution process improvement projects, including planning, design and implementation • Strategic advisor to top management on planning, acquisition and operational improvements • Project manager for design and implementation of improved operation and maintenance techniques, for a broad range of international electric utilities • Project manager for completion of acquisition integration and synergy capture efforts • Team leader for electric operation and maintenance improvement efforts 	
Related Functional Experience:	
<ul style="list-style-type: none"> • Transmission system maintenance • Transmission construction management • Transmission system planning • Operations efficiency planning • Energy control 	<ul style="list-style-type: none"> • Energy load management • Generation/transmission integration • Strategic planning • Project management • Synergy evaluation
Education:	
<ul style="list-style-type: none"> • Bachelor of Business Administration, George Washington University • Masters of Business Administration, George Washington University 	



KEVIN CARDEN

Experience:

- Managing Director, Astrape Consulting, LLC
- Modeling and design for assessment of power supply options
- 9 years of diverse utility management experience
- Developed proprietary generation reliability and dispatch model for electric utilities
- Generation Reliability Manager, Southern Company Services
- Demand forecasting, demand-side option management, and optimal reserve margin targets

Major Clients:

- Southern Company Services
- Georgia Power Company
- Competitive Energy Insight
- Portland General Electric Company
- Southern Progress Corporation
- LCRA
- SMUD

Related Previous Experience:

- Evaluation, procurement, and administration of long term power purchase contracts
- Responsible for assessing and planning to meet reliability requirements
- Intensive power modeling experience in multiple applications, including software design
- Demand-side options pricing and evaluation
- Bid preparation for power purchase RFPs

Related Functional Experience:

- Demand Forecasting
- Reliability Planning
- Dispatch Modeling
- Electric Market Analysis
- Resource Planning
- Contract Management
- Risk Assessment and Mitigation
- New Generation Development
- Project Financial Analysis

Education:

- B.S., Industrial Engineering, The University of Alabama